Air Force Research Laboratory|AFRL
Science and Technology for Tomorrow's Air and Space Force

SUCCESS STORY

DR. DARNELL E. DIGGS EARNS TOP MINORITIES IN SCIENCE AWARD

Science Spectrum magazine recently selected Dr. Darnell E. Diggs, an AFRL Materials and Manufacturing Directorate scientist, to receive its Top Minorities in Science award. The magazine presents this award to outstanding Hispanic, Asian-American, Native American, and African-American professionals. Award winners--known as Science Spectrum Trailblazers--contribute exemplary scientific work that extends throughout and beyond their industry.

Science Spectrum magazine will honor Dr. Diggs and his fellow award recipients at a luncheon at the Baltimore Convention center (Baltimore, Maryland). The luncheon takes place during the Minorities in Research Science Conference, formerly known as the Emerald Honors Awards Conference.

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Accomplishment

Dr. Diggs' selection as a Science Spectrum Trailblazer recognizes his individual achievement and enhances AFRL's reputation as a world leader in materials research and development. His selection exemplifies the highest level of technical expertise, professionalism, and dedication.

Dr. Diggs' research focuses primarily on materials for high-performance optoelectronic devices. These improved devices will revolutionize laser communications, optical data links, and optical control of aircraft and satellite systems that are vital to the Air Force and the Department of Defense. He is also working on chemical and biological detection techniques for signature recognition, which is essential for base protection.

Background

A graduate of Alabama Agricultural and Mechanical University, Dr. Diggs has demonstrated his expertise in devising various optical characterization methods for measuring refractive index, propagation loss, electrical conductivity, optical nonlinearity and low- and high-frequency dielectric constants, and in determining materials compatibility for state-of-the-art core and cladding materials.

During his short tenure, Dr. Diggs has authored and coauthored many published technical articles in the area of nonlinear optical polymers. He has served as a panelist at the National Society of Black Physics Students Conference and as a technical speaker at the invitation of the National Society of Black Physicists Conference. He has also accepted invitations to serve as a technical presenter at the International Society for Optical Engineering Photonics West Conference and has assisted the conference chair in the program's organization.

Dr. Diggs actively mentors high school, undergraduate, and graduate students. He provides training for visiting scientists, summer teachers, and reservists on a large number of experimental techniques. His demonstrated level of responsibility within AFRL is highly impressive for a scientist just beginning his professional career. His leadership and technical achievements show great promise of continuing advancement.

Materials and Manufacturing
Awards and Recognition

Additional Information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (ML-S-05-44)